

ABSTRACT

Methods and systems for transmitting data packets enable a communication device having limited memory to transmit data files in a packet-based network. The communication device partitions the sequence number field transmitted with a data packet into multiple portions. The communication device then generates a sequence number corresponding to the portions, where at least one portion identifies a particular segment of the data file. The communication device then transmits a data packet including a segment of a data file and the sequence number to a receiving device. When the communication device receives the acknowledgement packet from the receiving device, the communication device may determine which segment of the data file to transmit next.